

This listing of claims will replace all prior versions and listings of the claims in the application:

Listing of the Claims:

1. (Currently amended) An apparatus, ~~comprising for performing a process for reducing to metallic form metal oxides, the metal oxides comprising metal oxides present in spent nuclear fuel, wherein the apparatus comprises:~~

a container having spent nuclear fuel therein;

an electrochemical cell in the container which comprises:

a body or housing;

a cathode container; and

a cathode connector;

wherein said body or housing is maintained as the cathode, and said electrochemical cell is free from bolted or screwed fittings; and

wherein said body or housing is configured to connect with the spent nuclear fuel so as to reduce to metallic form metal oxides contained in the spent nuclear fuel, which are responsive to a voltage applied thereto.

2. (Original) An apparatus as claimed in claim 1 wherein said cathode connector is affixed to an internal surface of the cell.

3. (Original) An apparatus as claimed in claim 2 wherein said cathode connector is affixed to an internal surface of the cell by means of welding.

4. (Previously Presented) An apparatus as claimed in claim 1 wherein an electrical connection from the cathode container to the body or housing of the cell is provided by means of a cathode connector.

5. (Original) An apparatus as claimed in claim 4 wherein said electrical connection is provided by means of a press connection.

6. (Previously Presented) An apparatus as claimed in claim 1 wherein said cathode connector comprises a cathode rail.

7. (Original) An apparatus as claimed in claim 6 wherein said rail is welded to the base of the cell.

8. (Previously Presented) An apparatus as claimed in claim 1 wherein the cathode container comprises a mesh basket or metal oxide retaining vessel.

9. (Previously Presented) An apparatus as claimed in claim 1 wherein the cathode container comprises an assembly of cathode containers.

10. (Original) An apparatus as claimed in claim 9 wherein said assembly comprises an assembly of mesh baskets or metal oxide retaining vessels.

11. (Previously Presented) An apparatus as claimed in claim 1 wherein the electromechanical cell further comprises a carbon anode.

12. (Previously Presented) An apparatus as claimed in claim 1 wherein the body or housing of the cell is maintained as the cathode by the provision of an electrical connection from a power supply to the body or housing of the cell.

13 - 26. (Canceled)